Abstract of the Disclosure

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Disclosed is a stent graft prosthesis comprising a graft portion that includes a main body portion and an cuff portion, the cuff portion generally located at or near the proximal end of the main body portion and extending circumferentially therealong. Stents comprising the graft supporting structure are also attached to graft portion about the proximal end. In one embodiment, the cuff portion comprises material that is folded over the outside surface of the main body portion with an anchoring stent being attached over the cuff and main body portions, extending proximally therefrom. In another series of embodiments, the cuff portion comprises an external sealing zone that extends around the outer main body portion to help prevent leakage of fluids. In one example, the material of the second edge of the cuff portion is frayed to better engage the vessel walls and promote thrombus and/or tissue growth.